

## ABSTRACT

A dynamic coating includes at least one polymeric layer for attachment to a surface. The polymeric layer includes at least one electrically conducting polymer including layer, wherein under influence of a dynamic signal applied to the polymeric layer, a contact angle of the polymeric layer dynamically and substantially increases or decreases upon oxidation or reduction of the polymer. The polymeric layer can also expand or contract upon oxidation or reduction. The coating can be used for a variety of applications including a non-toxic biofouling preventative system and for forming low voltage electrowetting pumps.